

# Python: module vcs.colormap

## vcs.colormap

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# Colormap (Cp) module

### Modules

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### Classes

UserDict.UserDict

RGB Table

Cp

class **Cp**

Class: Cp

# Colormap

Description of Cp Class:

The Colormap object allows the manipulation of the colormap index.

This class is used to define a colormap table entry used in VCS, can be used to change some or all of the colormap R,G,B attributes of an existing colormap table entry.

Other Useful Functions:

a=vcs.init()	# Constructor
a.show('colormap')	# Show predefined colormap of
a.update()	# Updates the VCS Canvas at
a.mode=1, or 0	# If 1, then automatic update 0, then use update function to update the VCS Canvas.

Example of Use:

a=vcs.init()

To Create a new instance of colormap use:

cp=a.createcolormap('new','quick') # Copies content of 'red' to  
cp=a.createcolormap('new') # Copies content of 'default'

To Modify an existing colormap use:

cp=a.getcolormap('quick')

cp.list()

# Will list all the colormap

```

        #      R,G,B attribute value
cp.color=16,100,0,0
cp.color=16,0,100,0
cp.color=17,0,0,100
        # Index, R, G, B
        # Index range from 0 to 255,
        #      modify from 0 to 239
        # R, G, B values range from
        #      0 is low intensity and

```

Methods defined here:

```

__init__(self, parent, Cp_name=None, Cp_name_src='default', createCp=0)
    ######
    #
    # Initialize the colormap attributes.
    #
    #####
____setattr__(self, name, value)
    #####
    #
    # Set colormap attributes.
    #
    #####
list(self)
    #####
    #
    # List out colormap members (attributes).
    #
    #####
script(self, script_filename=None, mode=None)
    Function:      script                                     # Calls __vcs.s
Description of Function:
    Saves out a colormap graphics method in VCS or Python script
    designated file.

Example of Use:
    script(scriptfile_name, mode)
        where: scriptfile_name is the output name of the
                mode is either "w" for replace or "a" for append

    Note: If the the filename has a ".py" at the end
          Python script. If the filename has a ".scr"
          produce a VCS script. If neither extension
          default a Python script will be produced.

    a=vcs.init()
    cp=a.createcolormap('temp')
    cp.script('filename.py')                                # Append to a Python file
    cp.script('filename.scr')                            # Append to a VCS file "filename.scr"

```

```
cp.script('filename', 'w')           # Create or overwrite to
```

class ***RGB\_Table***(UserDict.UserDict)

Methods defined here:

***getitem***(self, key)

***init***(self, parent, name, dict=None)

***setitem***(self, key, value)

---

Methods inherited from UserDict.UserDict:

***cmp***(self, dict)

***contains***(self, key)

***delitem***(self, key)

***len***(self)

***repr***(self)

***clear***(self)

***copy***(self)

***get***(self, key, failobj=None)

***has\_key***(self, key)

***items***(self)

***iteritems***(self)

***iterkeys***(self)

***itervalues***(self)

***keys***(self)

***pop***(self, key, \*args)

***popitem***(self)

***setdefault***(self, key, failobj=None)

***update***(self, dict=None, \*\*kwargs)

***values***(self)

Class methods inherited from [UserDict.UserDict](#):

***fromkeys***(cls, iterable, value=None) from [\\_\\_builtin\\_\\_.classobj](#)

## Functions

***copyCp***(old\_name, new\_name)

```
#####
#
# Function:      copyCp
#
# Description of Function:
#     Function that copies an existing colormap to an new colormap
#
#
# Example of Use:
#     copyCp(old_name, new_name)
#         where: old_name is the current name of colormap
#                 new_name is the new name for the colormap
#
#####
#####
```

***getCpmember***(self, member)

```
#####
#
# Function:      getCpmember
#
# Description of Function:
#     Private function that retrieves the colormap members from
#     structure and passes it back to Python.
#
#
# Example of Use:
#     return_value =
#     getCpmember(self, name)
#         where: self is the class (e.g., Cp)
#                 name is the name of the member that is being
#
#####
#####
```

***removeCp***(name)

```
#####
#
# Function:      removeCp
#
# Description of Function:
#     Function that removes an existing colormap.
#
#####
#####
```

```

# Example of Use:
#     removeCp(name)
#             where: name is the current name of colormap graphic
#
#####
renameCp(self, old_name, new_name)
#####
#
# Function:      renameCp
#
# Description of Function:
#     Private function that renames the name of an existing colormap
#     graphics method.
#
#
# Example of Use:
#     renameCp(old_name, new_name)
#             where: old_name is the current name of colormap graphic
#                     new_name is the new name for the colormap graphic
#
#####
setCpmember(self, member, key, value)
#####
#
# Function:      setCpmember
#
# Description of Function:
#     Private function to update the VCS canvas plot. If the canvas
#     set to 0, then this function does nothing.
#
#
# Example of Use:
#     setCpmember(self, name, key, value)
#             where: self is the class (e.g., Cp)
#                     name is the name of the member that is being
#                     key is the index value into the colormap table
#                     value is the new value of the member (or attribute)
#
#####

```

## *Data*

**StringTypes** = (`<type 'str'>`, `<type 'unicode'>`)